HAWAI'I JOURNAL WATCH

KAREN ROWAN MS

Highlights of recent research from the University of Hawai'i and the Hawai'i State Department of Health

RETHINKING THE USE OF GDP

Improvements in a country's healthcare system should not be measured only by their effect on the country's gross domestic product (GDP). GDP does not include any measures of environmental quality, societal equitability, or longevity, and therefore it undervalues human health, according to a new analysis paper published in The BMJ (https://www.bmj.com/content/363/bmj. k4371). Lead author Victoria Fan ScD, with UH Public Health, and colleagues argue that other measures, such as the value of life years (VLYs), can better illustrate the benefits of investing in health care and should be used instead of GDP when a country is considering system improvements. Greater education and awareness about such measures could challenge the dominance of GDP in the popular discourse and in policy-making decisions.

HIGH-RISE FIRES

Residents of a high-rise building in Hawai'i who experienced a fire reported spending three or more minutes deciding whether to evacuate, according to a new qualitative study. During this time, the residents looked for cues such as smoke, flames, and screaming to determine whether there was a true fire or a false alarm, according to the paper published in August in PLoS Currents (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6128701/?report=printable). All participants reported limited support from the building leadership for fire-preparedness efforts, according to lead author Gary Glauberman MS, RN, with the School of Nursing and Dental Hygiene, and colleagues. The findings show that fire drills and safety education are needed to help high-rise dwellers prepare for fires and make better judgements in fire situations, especially in light of the local and global proliferation of high-rise buildings.

RACE AND PRECISION MEDICINE

For health care providers serving the racially diverse and highly admixed populations of Hawai'i, Asia and the Pacific, using a patient's self-reported race when deciding on medications and dosing may have several pitfalls, according to a new viewpoint article published in September in The Pharmacogenomics Journal (https://www.nature.com/articles/s41397-018-0046-0). The burgeoning field of pharmacogenomics, which considers how a patient's genes affect the way he or she metabolizes and responds to medications, may provide better tools, according to author Youssef Roman PharmD, PhD, with The Daniel K. Inouye College of Pharmacy. Although there are examples of racial groups that have higher rates of certain genetic variations within drug-metabolizing enzymes, the concept of race is imprecise. To provide more patient-centered care, pharmacogenomics has the potential to help providers better predict patients' responses to drug therapy.

HEART DISEASE IN MEN

Men in Japan and Korea have a lower prevalence of plaque in their carotid arteries compared with white men, a new cross-sectional study of nearly 1,000 middle-aged men shows. Researchers including Kamal Masaki MD, of the John A. Burns School of Medicine, looked at data from carotid ultrasounds and found that 4.8% of Japanese men, 10.6% of Korean men, and 22.8% of white men had plaques in their carotid arteries. None had been previously diagnosed with cardiovascular disease (CVD). The lower plaque burden in Japan and Korea could not be explained by traditional CVD risk factors, so the researchers hypothesized that lower carotid plaque rates in Japan may be due to low levels of inflammation or genetic factors. Koreans are genetically similar to Japanese people, and yet had a higher plaque prevalence, suggesting that this difference may be due to unknown environmental factors, the researchers wrote in their study, published in September in the International Journal of Cardiology (https://www.ncbi.nlm.nih.gov/pubmed/29887456).

CANCER SURVIVORS IN ONCOLOGY RESEARCH

There is a critical need in oncology for leadership from researchers who are also cancer survivors. These researchers have exclusive access to evidence on the psychosocial aspects of cancer treatment as a result of having survived cancer as teens or young adults, writes Christabel Cheung PhD, with the Myron B. Thompson School of Social Work. These researchers are a self-actualized and highly motivated group. They have scientific skills plus lived experiences to draw upon in their work, writes Cheung, a cancer survivor herself, in a viewpoint article recently published in Cancer Therapy & Oncology International Journal (https://juniperpublishers.com/ctoij/pdf/CTOIJ.MS.ID.555795.pdf). Established cancer researchers should partner with cancer survivors in oncology research to gain insights into patient experiences and to provide mentorship to the growing cadre of survivor-researchers.

ALCOHOL AND COLORECTAL CANCER

New findings from the ongoing Multiethnic Cohort Study suggest that the previously identified link between alcohol consumption and increased colorectal cancer risk also exists in Native Hawaiians, Japanese Americans, Latinos, and whites, but not in African Americans. Overall, the risk of colorectal cancer was 12% higher in those who reported consuming approximately one to two drinks per day, and 24% higher in those who consumed more than two drinks daily, according to findings from lead author Song Yi Park PhD with the UH Cancer Center. Beer and wine, but not liquor, were found to be linked with an increased risk of colorectal cancer. The paper was published online Sept. 15 in the American Journal of Epidemiology (https://academic.oup.com/aje/advance-article-abstract/doi/10.1093/aje/kwy208/5098396?redirectedFrom=ful ltext).